Memo

Date: August 30, 2005

To: Mr. David Collins, Chairperson, Development Impacts Sub-Committee

Members - Development Impacts Sub-Committee

CC: Marlene Gafrick, Director, Department of Planning & Development

From: Ed Taravella

RE: Preliminary Report from the Task Force

DRAFT

A task force composed of myself, Bob Collins, David Hightower, Jack Sakolosky, Jack Rose and Kent Marsh have met twice to consider the issue of infrastructure replacement in areas under going re-development. Our charge was to develop a preliminary proposal or means for funding the cost of upgrading the infrastructure in older, inner city neighborhoods where re-development is increasing the density of residential units and the existing systems (water, sanitary sewer, storm drainage and streets) are inadequate. We enlisted the input of Bob Collie of Andrews Kurth at our last meeting. Bob, having once been with the city legal department and still involved in public finance provided helpful comments in this discussion.

Several public policy questions immediately arise in these situations. Does the neighborhood desire to maintain its existing "character" or is it willing to accept the market forces that are driving the demand for re-development? Is it in the best interest of the City for the re-development to occur? Or, should policies and regulations be put in place to prevent the re-development or only accommodate rebuilding of the existing condition? Rice Military is an example of such a neighborhood currently in this evolution. Several neighborhoods are also in this process and many others are beginning to feel the market pressures of re-development. We did not try to address these fundamental issues.

Our discussions covered a broad range of possibilities including in-city municipal utility districts ("MUD"), public improvement districts ("PID"), tax increment reinvestment zones ("TIRZ"), management districts, enterprise zones and the ongoing capital improvement program. We agreed that any entity that imposed an over laying taxing or assessment on existing property owners would not be a viable option, either politically or from a market view point.

After exhaustive discussion, it was agreed that the approach which had the most merit for further evaluation was using a combination of builder impact fees and a city sponsored

financing entity, such as a TIRZ. Given the current political climate related to TIRZs and the fact that a TIRZ has much more authority than is required for the task, a new type of entity should be considered. This may require special legislation; however the evaluation of this aspect was considered outside the role of our task force.

These would be a new, or "second generation" TIRZ. They would function much like a TIRZ in that the incremental increased tax values in the defined neighborhood would be used for the city's share of the infrastructure cost. However, they would (i) be limited to only basic infrastructure, (ii) would have a sunset provision that terminates the entity upon retirement of any debt issued and (iii) be controlled by the city, not any one private development entity.

For purposes of this memo and discussion, and not necessarily a recommendation, we have labeled these new entities Neighborhood Redevelopment Zones or "NERDZ".

The basic concept would be as follows:

1) The Planning and Development Department ("PDD"), working with an advisory group from the private sector would identify a neighborhood, or neighborhoods, that are beginning to go through a re-development of the residential base. The boundaries of these neighborhoods would be used to define the NERDZ, or Zone. The group would assess the existing developed condition and make an educated projection of its redevelopment potential, including land uses and densities.

2) PDD, working with the Public Works and Engineering Department ("PWED"), possibly aided by outside engineering consultants would complete an assessment of the existing water, sanitary sewer, storm drainage systems and streets (the "Existing Facilities") within the Zone.

   The assessment would also need to look at "off site" (outside the boundaries of the Zone) or down stream infrastructure impacts, particularly drainage. In some cases this would complicate the analysis since other areas are also served by the trunk facilities that serve the Zone.

3) PDD would then prepare a plan for the infrastructure that would need to be replaced or upgraded to serve the Zone under the projected new development conditions (the "New Facilities"), assuming some level of partial or total redevelopment of the Zone. The plan would include a layout of the New Facilities, an estimate of the cost to construct the needed improvements and a projection of the time frame in which the work would be done.

4) An infrastructure financing plan would be created that incorporates (i) a builder impact fee ("BIF") that would be imposed in that Zone and (ii) NERDZ bonds or some similar financing instrument (the "NERDZ Debt").

The amount of funding raised through the BIF will need to be determined based on a cost sharing structure for each Zone. The BIFs would be assessed at the time of the building permits in the Zone and **WILL BE KEPT IN A DEDICATED FUND TO BE USED SOLEY FOR IMPROVEMENTS WITHIN THE BOUNDARIES OF THAT PARTICULAR NERDZ.** However, the contributions from the BIF in each Zone should be equitable across the City based on a relative proportion of public and private contributions.

The NERDZ should be created as early as possible in the re-development of the Zone in order to capture as much incremental increase as possible above the current condition. As with a TIRZ, this would allow the increase in value to be "captured' for the benefit of the improvements in the Zone.

The BIF would be a new fee. Our group did not investigate what portion of the current water and sewer impact fees should be contributed to the reconstruction. However this must be part of the equation.

5) Prior to the adoption and assessment of any BIFs, the City would commit to issue NERDZ Debt to fund the New Facilities and a time schedule for the implementation of their construction. Based upon the recommendation and analysis performed by the City's financial advisor, once the incremental increase in taxable value hits a certain level, bonds may be issued to fund the infrastructure improvements, in conjunction with the impact fee funds already on deposit.

6) Since it is possible that there would be a number of NERDZ created in the City, the City might consider creating a Master Local Government Corporation (the "MLGC") that would be responsible for the budgeting, administration and finances of all NERDZ.

In order for this concept to work, it is critical that the Zone be defined and NERDZ established early in the re-development of the area. In addition to capturing the full incremental value of the new development, this would also provide a level playing field for all of the builders working in the NERDZ. By allowing BIFs only to be assessed after the establishment of the NERDZ, this creates the necessary impetus to establish to NERDZ early in the process.

It is recommended that these new impact fees will not be charged on affordable housing, as is done currently with water and sewer impact fees.

Drainage Task Force
Development Impacts Sub-Committee
City of Houston
October 12, 2005

The issue of infill development relative to the current Chapter 9 regulations of the City of Houston Department of Public Works and Engineering **Infrastructure Design Manual** were reviewed. It is recommended that two items be added as noted below. Copies of the current wording of these items are attached for information.

Item 9.05.H.3.b. Add the following statement:

The subdividing of single family residential tracts greater than 15,000 SF in area does not exempt the subdivided tracts from detention.

Item 9.05.H.3.c. Add the following statement:

The subdividing of larger tracts into smaller tracts of less than 1 acre will require the detention volume of 0.5 acre-feet per acre of increased impervious area.

The proposed changes should be reviewed in more detail with Public Works and Engineering Department staff to fully investigate unintended consequences.

The issue of drainage impacts relative to infill development was reviewed considering the current **Grading Permits for Excavations and Fill of the City of Houston**. It was felt that the section related to Storm Utility Letters should possibly be revised to tie more directly to the requirement for detention noted in Chapter 9 of the Infrastructure Design Manual. Currently, based on questions (16) and (17) a tract of land does not have to secure a Storm Availability Letter if the development of impervious cover is less than 7,000 SF and the site drainage is not tied to a public storm sewer system. If a development does not have to secure a Storm Availability Letter relative to this Worksheet for a Grading Permit for Excavation and Fill, then the requirement for detention may be missed during the Permit Plan Review Process because of the absence of the letter.

Attachments

- Items 9.05.H.3. b&c Chapter 9 regulations of the City of Houston Department of Public Works and Engineering **Infrastructure Design Manual**
- Worksheet for **GRADING PERMITS FOR EXCAVATIONS AND FILL**

3. Calculation of Detention Volume.

   a. Detention volume for Development areas is calculated on the basis of the amount of area of increased impervious cover.

   b. Areas less than 1 acre: Detention will be required at a rate of 0.20 acre feet per acre of increased impervious cover. Single family residential tracts of 15,000 square feet in area or less are exempt from detention. The subdividing of larger tracts into smaller tracts of 1.0 acre and less will require the detention volume of 0.5 acre-feet per acre of increased impervious cover.

   c. Areas between 1 acre and 50 acres: Detention will be required at a rate of 0.50 acre-feet per acre of increased impervious cover.

   d. Areas greater than 50 acres: Reference HCFCD Criteria Manual.

   e. Private parking areas, private streets, and private storm sewers may be used for detention provided the maximum depth of ponding does not exceed 9 inches directly over the inlet, and paved parking areas are provided with signage stating that the area is subject to flooding during rainfall events.

   f. Private transport truck only parking may be used for detention provided the maximum depth of flooding does not exceed 15 inches directly above the inlet and signage is provided stating that the area is subject to flooding during rainfall events.

4. Calculation of Outlet Size.

   a. Detention pond discharge pipe into an existing storm sewer line or existing City of Houston ditch:
      (1) Maximum pool elevation at or below the design hydraulic grade at the drainage system outfall - The discharge line shall be sized for the Design Storm with the discharge pipe flowing full. The pond will float on the drainage system to provide maximum benefit.
      (2) Maximum pool elevation at or above the hydraulic grade at the drainage system outfall - Provide a reducer or restrictor pipe to be constructed inside the discharge line. The discharge line shall be sized for the Design Storm with the discharge pipe flowing full.

   b. Reducer or Restrictor Pipes shall be sized as follows:
      (1) Allowable Discharge Rate – Use the lowest of the discharge rates described below:

Public Works & Engineering Department
Planning & Development Services Division

GRADING PERMITS FOR EXCAVATIONS AND FILL

Effective Date: May 1, 2005

PERMITS

A separate grading permit is required for dirt fill over 1 foot in depth and for excavations over 2 feet in depth for projects other than those listed in the following exceptions.

Exceptions for All Grading

- Isolated self-contained areas
- Refuse disposal sites
- Mining, quarrying, stockpiling not affecting adjacent property

Excavation Exceptions

- Building basements and footings
- Cemetery graves
- Wells, tunnels, or utilities
- Soil testing
- Up to 5 feet with less than 1:1½ slopes

Fill Exceptions

- Fill less than 1 foot placed on natural terrain with < 1: 5 slope
- Fill up to 50 cubic yards & < 3 feet & no drainage obstructions & not intended to support structures [50 cubic yards = 1350 sq. ft. @ 1' depth

Permit Fees

Excavation permits $35.00

Grading and fill permits $40.00

PLAN REVIEW

The attached Grading Worksheet should be completed to determine whether a project requires a permit and the type of plans or reports required.

All Grading Plans

- Vicinity Map
- Existing Topography
- Proposed Topography
- Storm Letter if applicable
- Building with 15 feet of grading or on adjacent property

Engineered Plans - Projects involving more than 5,000 cubic yards of dirt to be moved within the site, to the site or from the site [5,000 cubic yards = 135,000 sq. ft. @ 1' depth]

- Drainage Area and Devices
- Geotechnical Report
- Runoff Calculation

INSPECTIONS

Before starting work at jobsite:
Post address
Weather protected inspection cards
Weather protected plans

At final inspection at jobsite:
Compaction report

GEOTECH REPORTS

- Engineered Grading
- Cut Slope > 50%
- Geological Factors

Provision shall be made to prevent the accumulation of water or damage to any foundations on the premises or the adjoining property. When a lot or plot is graded to a higher or lower finished grade level exceeding 1 foot than the natural grade on adjacent property, the owner of such lot or plot shall provide a retaining wall or walls on his/her own property to protect the adjacent property from caving of earth or overflow of water.

Planning & Development Services Division

GRADING PERMITS FOR EXCAVATIONS AND FILL

Appendix E of the Houston Adopted 2000 International Building Code as Amended specifies permit requirements for grading a lot of any size on private property. ***Section 1*** - Identifies when a separate *"Grading Permit"* is required. *Section 2* – Identifies the type of grading permit required *"Engineered Grading or Regular Grading"*, when a *"Geotechnical Report"* is required in the plans, and when a *"Storm Availability Letter"* is required to be attached to the submittal documents.

Worksheet

Grading Permits are required for any excavating or filling or combination thereof and includes:

Excavation Permits - Including work proposing the mechanical removal of earth material.

Fill Permit - Including a deposit and/or relocation of earth material placed by artificial means.

Section 1 Permits Required

A Grading Excavation permit is required if "Yes" is answered to any question 1 through 4.

_____ **(1)** Does the excavation work affect the lateral support or increase the stresses in, or pressure upon any adjacent, or contiguous property?

_____ **(2)** When excavating below finish grade for basements and footings of a building, retaining wall or other structures authorized by a valid building permit, will there be an unsupported excavation height greater than 5 feet after completion of such structure?

_____ **(3)** Will there be any excavation greater than 5 feet in depth?

_____ **(4)** Will the excavation create a cut slope 2 feet or more in height but less then 5 feet, with a slope steeper than 1 unit vertical in 1.5 units horizontal (33% slope)?

A Grading Fill permit is required if "Yes" is answered to any question 5 through 10.

(50 cubic yards = 1350 sq. ft. @ 1 ft depth)

_____ **(5)** Does the fill work affect the lateral support or increase the stresses in, or pressure upon any adjacent, or contiguous property?

_____ **(6)** Does the scope of work include fill that is 3 feet or more in depth?

_____ **(7)** Does the scope of work include fill greater than 1 foot but less than 3 feet, with a slope that is equal to or greater than 1 unit vertical in 5 units horizontal. (20% slope)?

_____ **(8)** Does the scope of work include fill that is greater than 50 cubic yards on any one lot?

_____ **(9)** Does the proposed fill obstruct any natural and/or previously constructed drainage course?

_____ **(10)** Is the proposed fill greater than 1 ft in depth and intended to support a structure, "now or in the future"?

Section 2 Plans Required

NOTE: When the building official has cause to believe that geologic factors may be involved, grading will be required to conform to recommended grading, inspection, and testing by a *Professional Engineer.*

Engineered grading plans are required if "Yes" is answered to question #11. Plans shall be designed, sealed, signed, and dated by a professional engineer. These grading permits shall be designated *"Engineered Grading".*

(5000 cubic yards = 135,000 sq. ft. @ 1 ft depth)

_____ **(11)** Does the grading project exceed 5000 cubic yards?

Grading plans shall be designated "*Regular Grading*" if "Yes" is answered on question #12:

_____ **(12)** Does the grading involve less than 5000 cubic yards?

A Geotechnical Report is required if "Yes" is answered to any of the following questions:

_____ **(11)** Will there be any cut slopes steeper than 1 unit vertical in 2 units horizontal (25% slopes)?

_____ **(14)** Is there any grading that requires an engineered design?

_____ **(15)** Does the site include any special geological features and/or considerations for any grading?

A Storm Availability Letter is required to be included with the submitted documents if "Yes" is answered to question #16 or #17:

_____ **(16)** Does the scope of work include impervious cover added to a lot exceeding 7,000 sq. ft.?

_____ **(17)** Does the project include connection to the city's public storm sewer system?

Is tract of land greater than 15000 ft² Already Added.

ADDRESS:_____ PROJECT NUMBER _____ DATE _____